

Hexokinase 1 Rabbit mAb

Catalog No: #48867

Package Size: #48867-1 50ul #48867-2 100ul

Description

Product Name	Hexokinase 1 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal
Clone No.	ST47-05
Purification	ProA affinity purified
Applications	WB IHC ICC/IF FC
Species Reactivity	Hu, Ms, Rt
Immunogen Description	recombinant protein
Conjugates	Unconjugated
Other Names	BB404130 antibody Brain form hexokinase antibody dea antibody DrHXK1 antibody EC 2.7.1.1 antibody Glycolytic enzyme antibody HEXOKIN antibody hexokinase I antibody Hexokinase PI antibody Hexokinase type I antibody Hexokinase, tumor isozyme antibody Hexokinase-1 antibody Hexokinase-A antibody HK I antibody HK1 antibody HK1 tb antibody Hk1-s antibody HK1-ta antibody HK1-tb antibody HK1-tc antibody HKD antibody HKI antibody HMSNR antibody HXK1 antibody HXK1_HUMAN antibody im:7148527 antibody mHk1-s antibody wu:fc09d08 antibody wu:fc16e02 antibody wu:fc21e02 antibody wu:fq14b11 antibody zgc:55790 antibody zgc:77618 antibody
Accession No.	Swiss-Prot#:P19367
Calculated MW	Predicted band size: 102 kDa
SDS-PAGE MW	Observed band size: 110 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

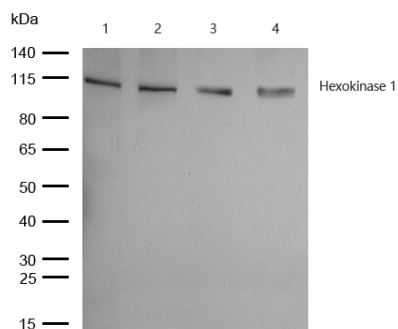
Application Details

WB: 1:500-1:2000

IHC: 1:50-1:200

ICC/IF: 1:50-1:200

Images



All lanes: Hexokinase 1 Rabbit mAb at 1/1k dilution

Lane 1 : 293 whole cell lysates

Lane 2 : SH-SY5Y whole cell lysates

Lane 3 : Mouse heart lysates

Lane 4 : Rat liver lysates

Lysates/proteins at 20 µg per lane.

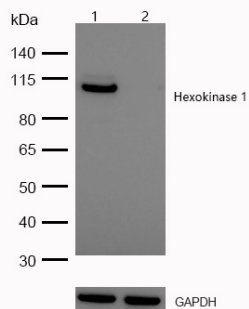
Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) at 1/20000 dilution

Predicted band size: 102 kDa

Observed band size: 110 kDa

Exposure time: 13 seconds

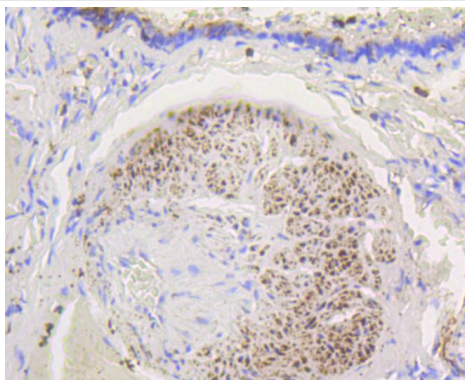


All lanes: Hexokinase 1 Rabbit mAb at 1/1k dilution

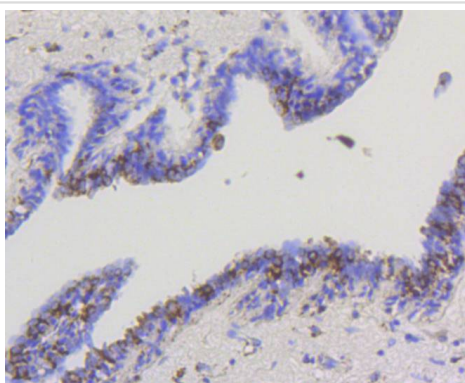
Lane 1 : Wild-type HeLa cell lysate

Lane 2 : Hexokinase 1 knockdown HeLa cell lysate

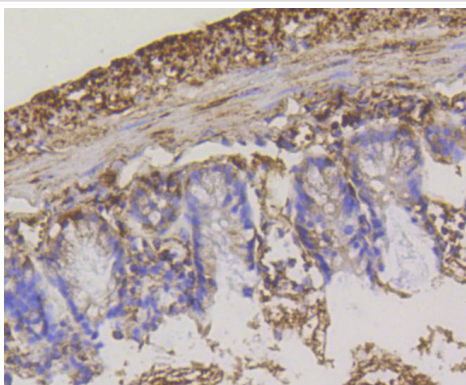
Lysates/proteins at 20 µg per lane.



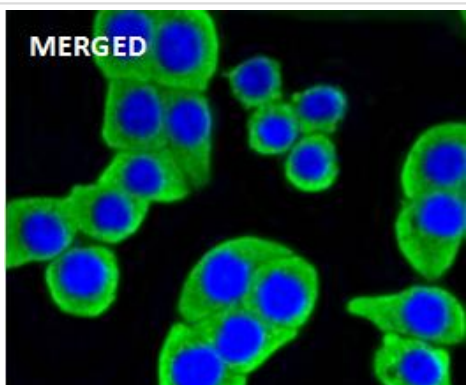
Formalin-fixed, paraffin-embedded human lung tissue stained for Hexokinase 1 using 48867 at 1/100 dilution in immunohistochemical analysis.



Formalin-fixed, paraffin-embedded human breast carcinoma tissue stained for Hexokinase 1 using 48867 at 1/100 dilution in immunohistochemical analysis.



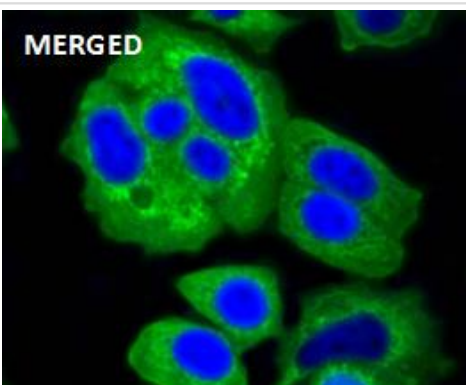
Formalin-fixed, paraffin-embedded mouse colon tissue stained for Hexokinase 1 using 48867 at 1/100 dilution in immunohistochemical analysis.



Immunocytochemistry/ Immunofluorescence Hexokinase 1 antibody (48867) ICC/IF staining of Hexokinase 1 in CRC cells. Cells were fixed with 4% Paraformaldehyde permeabilized with 0.1% Triton X-100.

Samples were incubated with 48867 at a working dilution of 1/100. The secondary antibody was Alexa FluorB 488 goat anti rabbit, used at a dilution of 1/500.

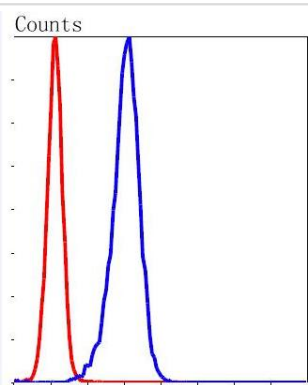
Nuclei were counterstained with DAPI.



Immunocytochemistry/ Immunofluorescence Hexokinase 1 antibody (48867) ICC/IF staining of Hexokinase 1 in MCF-7 cells. Cells were fixed with 4% Paraformaldehyde permeabilized with 0.1% Triton X-100.

Samples were incubated with 48867 at a working dilution of 1/100. The secondary antibody was Alexa FluorB 488 goat anti rabbit, used at a dilution of 1/500.

Nuclei were counterstained with DAPI.



Flow Cytometry (Intracellular) Hexokinase 1 antibody (48867) Flow cytometric analysis of K562 cells with Hexokinase 1 antibody at 1/50 dilution (blue) compared with an unlabelled control (cells without incubation with primary antibody) (red). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody.

Background

The hexokinases utilize Mg-ATP as a phosphoryl donor to catalyze the first step of intracellular glucose metabolism, the conversion of glucose to glucose-6-phosphate. Four hexokinase isoenzymes have been identified, including hexokinase I (HXK I), hexokinase II (HXK II), hexokinase III (HXK III) and hexokinase IV (HXK IV, also designated glucokinase or GCK). Hexokinases I-III each contain an N-terminal cluster of hydrophobic amino acids. Glucokinase lacks the N-terminal hydrophobic cluster. The hydrophobic cluster is thought to be necessary for membrane binding. This is substantiated by the finding that glucokinase has lower affinity for glucose than do the other hexokinases. HXK I has been shown to be expressed in brain, kidney and heart tissues as well as in hepatoma cell lines. HXK II is involved in the uptake and utilization of glucose by adipose and skeletal tissues. Of the hexokinases, HXK III has the highest affinity for glucose. Glucokinase is expressed in pancreatic beta cells where it functions as a

glucose sensor, determining the set point for insulin secretion.

Note: This product is for in vitro research use only and is not intended for use in humans or animals.